

CLAIMS- Marked-Up Version

1. (Currently amended) An improved separation element of a corn head row unit comprising:

- a. a source of power for rotation,
- b. at least two opposing stalk rolls connected to said power source,
- c. said stalk rolls having at least one flute,
- d. said flute having at least one penetration point; and,
wherein said penetration point is composed of hardened material.

2. (Currently amended) An improved separation element of a corn head row unit comprising:

- a. a source of power for rotation,
- b. at least two opposing stalk rolls connected to said power source,
- c. said stalk rolls having at least one flute,
- d. said flute having a knife edge; and,
wherein said entire knife edge is composed of hardened material.

11. (Currently Amended) An improved separation element of a corn head row unit comprising:

- a. a source of power for rotation,
- b. at least two opposing stalk rolls connected to said power source,
- c. each of said stalk rolls having at least one flute wherein the flutes are opposite each other,
- d. said flutes having a knife edge; and,
- e. said entire knife edge is composed of hardened material.

20. (Currently Amended) An improved method of engaging corn plants with a corn head row unit comprising the steps of:

- a. engaging the corn plant with a plurality of rotational elements,
- b. pinching the corn plant between said rotational elements,
- c. penetrating the corn plant stalk with said rotational elements a pre-determined penetration depth, wherein the pre-determined penetration

depth of each of said rotational elements is less than half the diameter of the corn plant stalk,

- d. pulling the corn plant stalk with the rotational elements,
- e. said penetrating, pinching and pulling steps repeatedly lacerating the corn plant stalk along its length and width; and,

separating the corn plant ear from the corn plant stalk and husk.